Amendments

Please amend the claims as follows:

1.   (Currently amended)   An automated device for ~~imaging and~~ diagnosis of a target,

comprising:

~~an endoscope,~~

~~a first~~ means for performing ~~a~~ white-light imaging assessment of the target~~; and~~

~~a second~~ means for simultaneously performing ~~an~~ at least one additional assessment of

the target as a transparent background task to determine if the target is in a normal state

or an abnormal state; and

means for performing an action based on said additional assessment.

2.   (Original) The device of claim 1, wherein said additional assessment comprises at least

one fluorescence imaging mode.

3.   (Original) The device of claim 1, wherein said additional assessment comprises at least

one of reflectance spectroscopy and fluorescence spectroscopy.

4.   (Currently amended) The device of claim 3, wherein said additional assessment further

comprises means for simultaneously performing at least one fluorescence imaging mode.

5.   (Currently amended) The device of claim 2, wherein said additional assessment further

comprises means for simultaneously performing at least one of reflectance spectroscopy and

fluorescence spectroscopy. ~~1, further comprising means for performing an action based on said~~

~~additional assessment.~~

6.   (Currently amended) The device of claim 1~~5~~, wherein said action comprises at least one

of an audible alert and a visible alert.

7.   (Currently amended) The device of claim 6, further comprising means for manually

changing a visual output mode after said <u>at least one of an audible alert and a visible</u> alert.

8.   (Original) The device of claim 7, wherein said means for manually changing further comprises at least one of means for displaying fluorescence images, means for displaying spectroscopic data, means for displaying composite images, means for highlighting said visual output mode, means for delineating regions of said visual output mode and means for overlaying said visual output mode.

9.   (Currently amended) The device of claim <u>6</u>7, further comprising means for automatically changing a visual output mode after said <u>at least one of an audible alert and a visible</u> alert.

10.   (Original) The device of claim 9, wherein said means for automatically changing further comprises at least one of means for displaying fluorescence images, means for displaying spectroscopic data, means for displaying composite images, means for highlighting said visual output mode, means for delineating regions of said visual output mode and means for overlaying said visual output mode.

11.   (Original) The device of claim 1, further comprising means to calculate a quantitative score based on said additional assessment.

12.   (Original) The device of claim 11, further comprising means to compare said quantitative score to a benchmark score.

13.   (Original) The device of claim 11, further comprising means to display said quantitative score and said benchmark score.

14.   (Currently amended) The device of claim 1, further comprising means for performing an action based on said additional assessment and on *a priori* ~~prior~~ information relating to the target.

15.   (Original) The device of claim 14, wherein said action comprises at least one of an

audible alert and a visible alert.

16.   (Currently amended) The device of claim 15, further comprising means for ~~manually~~ changing a visual output mode after said <u>at least one of an audible alert and a visible</u> alert.

17.   (Canceled)

18.   (Canceled)

19.   (Canceled)

20.   (Currently amended) The device of claim 14, further comprising means to calculate a quantitative score based on said additional assessment and on <u>said</u> <u>*a priori*</u> ~~prior~~ information relating to the target.

21.   (Original)   The device of claim 20, further comprising means to compare said quantitative score to a benchmark score.

22.   (Original) The device of claim 20, further comprising means to display said quantitative score and said benchmark score.

23.   (Original) The device of claim 1, further comprising means for performing an action based on said additional assessment and an analysis from a plug-in analyzer.

24.   (Original) The device of claim 23, wherein said plug-in analyzer comprises at least one of a Raman probe, a fluorescence excitation-emission matrix spectroscopy probe, an optical coherence tomography probe, and a confocal microscopy probe.

25.   (Original) The device of claim 23, wherein said action comprises at least one of an audible alert and a visible alert.

26.   (Currently amended) The device of claim 25, further comprising means for ~~manually~~ changing a visual output mode after said <u>at least one of an audible alert and a visible</u> alert.

27.   (Canceled)

28.   (Canceled)

29.   (Canceled)

30.   (Original) The device of claim 1, further comprising means to calculate a quantitative score based on said additional assessment and an analysis from a plug-in analyzer.

31.   (Original) The device of claim 30, further comprising means to compare said quantitative score to a benchmark score.

32.   (Original) The device of claim 30, further comprising means to display said quantitative score and said benchmark score.

33.   (Original) The device of claim 1, further comprising an endoscopy positioning system.

34.   (Currently amended) An automated method for imaging and diagnosing a target, comprising:

a first step of assessing illuminating the target based on a with white light imaging mode;

and

a second step of simultaneously performing an additional assessment of assessing the target as a transparent background task to determine if the target is in a normal state or in an abnormal state; and

performing an action based on a result of said additional assessment.

35.   (Currently amended) The method of claim 34, wherein said second assessing step comprises at least fluorescence imaging.

36.   (Currently amended) The method of claim 34, wherein second assessing step comprises at least one of reflectance spectroscopy and fluorescence spectroscopy.

37.   (Currently amended) The method of claim 36, wherein said second assessing step further comprises at least fluorescence imaging.

38.   (Currently amended) The method of claim ~~34~~35, wherein said second step further comprises simultaneous performing of at least one of a reflectance spectroscopy and a fluorescence spectroscopy, ~~further comprising performing an action based on a result of said assessing step~~.

39.   (Currently amended) The method of claim 34~~38~~, wherein said action comprises at least one of an audible alert and a visible alert.

40.   (Original) The method of claim 39, further comprising manually changing a visual output mode after said alert.

41.   (Original) The method of claim 40, wherein said manually changing step further comprises at least one of displaying fluorescence images, displaying spectroscopic data, displaying composite images, highlighting said visual output mode, delineating regions of said visual output mode and overlaying said visual output mode.

42.   (Original) The method of claim 39, further comprising automatically changing a visual output mode after said alert.

43.   (Currently amended) The method of claim 42, wherein said ~~means for~~ automatically changing step further comprises at least one of displaying fluorescence images, displaying spectroscopic data, displaying composite images, highlighting said visual output mode, delineating regions of said visual output mode and overlaying said visual output mode.

44.   (Original) The method of claim 34, further comprising calculating a quantitative score based on said additional assessment.

45.   (Original) The method of claim 44, further comprising comparing said quantitative score to a benchmark score.

46.   (Original) The method of claim 44, further comprising displaying said quantitative score

and said benchmark score.

47.　(Currently amended)　The method of claim 34, further comprising performing an action based on said additional assessment and on *a priori* ~~prior~~ information relating to the target.

48.　(Original)　The method of claim 47, wherein said action comprises at least one of an audible alert and a visible alert.

49.　(Currently amended)　The method of claim 48, further comprising ~~manually~~ changing a visual output mode after said <u>at least one of an audible alert and a visible</u> alert.

50.　(Canceled)

51.　(Canceled)

52.　(Canceled)

53.　(Currently amended)　The method of claim 47, further comprising calculating a quantitative score based on said <u>combined</u> additional assessment and <u>said a priori</u> ~~on prior~~ information relating to the target.

54.　(Original)　The method of claim 53, further comprising comparing said quantitative score to a benchmark score.

55.　(Original)　The method of claim 53, further comprising displaying said quantitative score and said benchmark score.

56.　(Original)　The method of claim 34, further comprising performing an action based on said additional assessment and an analysis from a plug-in analyzer.

57.　(Original)　The method of claim 56, wherein said plug-in analyzer comprises at least one of a Raman probe, a fluorescence excitation-emission matrix spectroscopy probe, an optical coherence tomography probe, and a confocal microscopy probe.

58.　(Original)　The method of claim 56, wherein said action comprises at least one of an

audible alert and a visible alert.

59. (Currently amended) The method of claim 58, further comprising ~~manually~~ changing a visual output mode after said <u>at least one of an audible alert and a visible</u> alert.

60. (Canceled)

61. (Canceled)

62. (Canceled)

63. (Original) The method of claim 34, further comprising calculating a quantitative score based on said additional assessment and an analysis from a plug-in analyzer.

64. (Original) The method of claim 63, further comprising comparing said quantitative score to a benchmark score.

65. (Original) The method of claim 63, further comprising displaying said quantitative score and said benchmark score.

66. (Original) The method of claim 34, further comprising using an endoscopy positioning system.

67. (New) The device of claim 1, further comprising means for performing a second additional assessment based on said action.

68. (New) The device of claim 67, wherein said second additional assessment is performed automatically.

69. (New) The device of claim 67, wherein said second additional assessment is directed interactively by a clinician.

70. (New) The device of claim 67, wherein said second additional assessment comprises at least one of a fluorescence imaging, a reflectance spectroscopy, and a fluorescence spectroscopy.

71. (New) The device of claim 7, wherein said means for manually changing delineates

suspected abnormal target boundaries on a white light image based on said additional assessment.

72.   (New) The device of claim 10, wherein said means for automatically changing delineates suspected abnormal target boundaries on a white light image based on said additional assessment.

73.   (New) The method of claim 34, further comprising a third step of assessing the target based on said action.

74.   (New) The method of claim 73, wherein said third step is performed automatically.

75.   (New) The method of claim 73, wherein said third step is directed interactively by a clinician.

76.   (New) The method of claim 73, wherein said third step comprises at least one of a fluorescence imaging, a reflectance spectroscopy, and a fluorescence spectroscopy.

77.   (New) The method of claim 40, wherein said manually changing a visual output mode after said alert step comprises delineating suspected abnormal target boundaries on a white light image based on said second step.

78.   (New) The device of claim 43, wherein said automatically changing step comprises delineating suspected abnormal target boundaries on a white light image based on said second step.